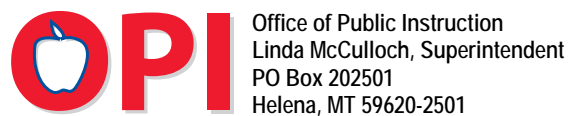


# **Critical Quality Educator Shortages**

**Identification of Schools and Licensure and Endorsement Areas  
Impacted by Critical Quality Educator Shortages**

Report to the Board of Public Education  
Revised March 2008

Prepared by Madalyn Quinlan, Chief of Staff  
Montana Office of Public Instruction



## Background

Senate Bill 2 of the May 2007 special legislative session authorized a Quality Educator Loan Assistance Program administered by the Board of Regents through the Office of the Commissioner of Higher Education. The program provides for the direct repayment of educational loans of eligible quality educators for up to 4 years. The total annual loan repayment assistance may not exceed \$3,000. Educational loans are loans made by a federal loan program, excluding federal Parents Loans for Undergraduate Students (PLUS) loans.

In addition to authorizing the program, the statute defines a *quality educator* as a full-time equivalent educator who holds a valid educator license or is a licensed professional providing services to students in a school district, an education cooperative, the Montana School for the Deaf and Blind, the Montana Youth Challenge Program or a state youth correctional facility.<sup>1</sup>

The legislative appropriation for quality educator loan assistance is \$350,000 in FY 2008 and \$700,000 in FY 2009 for a total of \$1,050,000 for the 2009 biennium. This funding level will support loan assistance to approximately 100-120 educators in FY2008 and 200-240 educators in FY2009.

## Critical Quality Educator Shortages

Section 20-4-503, MCA directs the Board of Public Education, in consultation with the Office of Public Instruction, to identify:

- (a) specific schools that are impacted by critical quality educator shortages; and
- (b) within the schools identified in (a), the specific quality educator licensure or endorsement areas that are impacted by critical quality educator shortages.

Quality educators working in schools that are identified as impacted schools and teaching in licensure or endorsement areas that are impacted by critical quality educator shortages are eligible for loan repayment assistance.

The Board of Public Education is required to publish an annual report listing the schools and the licensure or endorsement areas identified as impacted by critical quality educator shortages, explaining the reasons that specific schools and licensure or endorsement areas have been identified and providing information regarding any success in retention.

## Methodology for Identifying Critical Quality Educator Shortages

A working group met twice (July 10 and August 21, 2007) to discuss indicators of critical quality educator shortages. The group discussed a two-step process for first identifying the schools that are impacted by critical shortages and then identifying specific licensure and endorsement areas.

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<sup>1</sup> The complete definition of a Quality Educator is in 20-4-501(4), MCA.

### ***Identification of Impacted Schools***

The working group developed a rubric for scoring the needs of schools based on three factors: rural isolation, economic disadvantage, and student achievement. This report includes a recommendation for weighting these three factors to set a threshold for identifying schools as "impacted schools."

To measure the rural isolation, economic disadvantage, and low student achievement, the OPI developed a 24 point rubric based on locale code, the percentage of students eligible for free and reduced price meals, and the improvement status of schools under No Child Left Behind. Schools are listed as impacted schools if they are more rural, have a higher percentage of economically disadvantaged students, and/or have greater challenges in closing the achievement gap.

Locale codes are used by the National Center for Education Statistics and the US Census Bureau to indicate the urban-rural nature of a school based upon population density and geographic location. The codes range from 11 to 43 based on population density and proximity to an urbanized area. (Appendix A provides an explanation of locale codes.) For this report, a school was assigned 4 "rural isolation" points if it has a locale code of 42-Rural, Distant and 8 points if it has a locale code of 43-Rural, Remote. All other Montana schools have a locale code indicating that the school is located in a small city, suburb, town or rural fringe; these schools were assigned zero points for rural isolation.

The indicator of economic disadvantage that was chosen for this report is the number of Free/Reduced Price Participants as a percentage of total school enrollment. While this indicator has its flaws in that actual participation may fall short of eligibility, especially in the high schools grades, the working group considered it to be the best and most current indicator of economic disadvantage among the school population. Schools were given a score of 0 to 8 "economic disadvantage" points depending on the percentage of students participating in free/reduced price meals.

The indicator of student achievement that was chosen for this report is the improvement status of schools under No Child Left Behind. Schools were given a score of 0 to 8 "improvement status" points depending on whether the school was identified as in need of improvement for 2005-2006. If a school was not identified as in need of improvement, it is assigned zero improvement status points. If the school was identified as in need of improvement, the improvement status points increase from 1 point for a school in its first year of being identified for improvement to 8 points for a school in its fourth year of restructuring.

Table 1 shows the rubric that was used to assign points to each school based on indicators of rural isolation, economic disadvantage, and improvement status.

Table 1. Scoring Rubric for Determining Impacted Schools

<b>Scoring Rubric</b>	<b>Score</b>
<b>Rural Isolation</b>	
Locale Code 13 - Small City	0
Locale Code 22 - Suburb, Mid-Size	0
Locale Code 23 - Suburb, Small	0
Locale Code 31 - Town, Fringe	0
Locale Code 33 - Town, Remote	0
Locale Code 41 - Rural, Fringe	0
Locale Code 42 - Rural, Distant	4
Locale Code 43 - Rural, Remote	8
<b>Economic Disadvantage</b>	
Free/Reduced % $\geq 10\%$	1
Free/Reduced % $\geq 20\%$	2
Free/Reduced % $\geq 30\%$	3
Free/Reduced % $\geq 40\%$	4
Free/Reduced % $\geq 50\%$	5
Free/Reduced % $\geq 60\%$	6
Free/Reduced % $\geq 70\%$	7
Free/Reduced % $\geq 80\%$	8
<b>Improvement Status</b>	
School Improvement Year 1	1
School Improvement Year 2	2
School Improvement Year 3 or more	3
Corrective Year 1	4
Restructuring Year 1	5
Restructuring Year 2	6
Restructuring Year 3	7
Restructuring Year 4	8

Any school that has a total score of 11 points or more is listed as an impacted school. There are 324 schools on this list, of which 143 are elementary schools, 102 are middle schools or grade 7/8 schools, and 79 are high schools.

The Montana School for the Deaf and Blind, the Department of Corrections schools (Pine Hills and Riverside), the Montana Youth Challenge Program, and the state's 21 special education cooperatives were automatically added to the list of impacted schools. These entities are likely to employ a significant number of special education teachers (a category that is included in the specific quality educator endorsement areas).

### ***Identification of specific quality educator licensure or endorsement areas***

Each fall, schools report to the Office of Public Instruction regarding the challenges facing schools in filling vacancies for teachers, specialists, administrators and licensed professionals. These data are submitted on the Personnel Recruitment and Retention Report. The working group relied primarily on information submitted by schools through this report to determine the critical shortage areas for licensure and endorsement.

Additional information regarding emergency authorizations, positions filled by improperly assigned or unlicensed educators, and completers of professional educator preparation programs was also used to inform the process.

The working group looked at three available sources of information related to licensure and endorsement shortage areas:

- **Personnel Recruitment and Retention Report**

This report is completed annually by school districts as part of the Annual Data Collection submitted to the Office of Public Instruction. In this report, school administrators provide an indication of the difficulty they experience in hiring regular education teachers, special education teachers, school administrators, specialists, paraprofessionals, and other support staff. The statewide summary of the Personnel Recruitment and Retention Report is shown in Appendix B.

- **Emergency Authorizations**

This report is compiled by the OPI Educator Licensure unit. It lists the number of emergency authorizations approved during the 2006-2007 school year by endorsement area. In accordance with 20-4-111, MCA, a school district may apply to the Superintendent of Public Instruction for an emergency authorization of employment to hire a non-licensed individual as an instructor when the district is unable to find a licensed educator to fill the position. A statewide history of emergency authorizations granted by the state superintendent from 1999-2000 through 2006-2007 is included in Appendix C.

- **Misassignments Reported by Accredited Schools**

"Misassignment" refers to a teacher or administrator who is not assigned at the levels and/or in the subjects for which their license(s) is/are endorsed. The source of personnel assignment data is the Annual Data Collection submitted by school districts and special education cooperatives to the Office of Public Instruction.

The working group proposed a weighted score for evaluating the data from the Personnel Recruitment and Retention Report, which involved ranking hiring difficulty based on the degree of difficulty and the number of position vacancies. The degree of hiring difficulty was computed by adding the percentage of positions that were difficult to fill with those that were very hard to fill. This combined percentage was then multiplied by the number of position openings. For example, school districts reported that of the 63 vacancies for Music teachers statewide, 85.71% of the positions were difficult or very hard to fill. This resulted in a score of 54 points for Music openings.

Some education fields are relatively easy to fill, but because of the large number of openings, the education field receives a high score using the method described above. The most obvious example of this is elementary education. With 417 reported openings in 2006-2007 and 11.51% of the positions reported as difficult or very hard to fill, the elementary education field receives a weighting of 48.

To prevent an education field from being placed on the critical shortage list based on volume or difficulty alone, four additional criteria were added. For an education field to be included on the list of academic areas impacted by critical quality educator shortages, the education field must meet four conditions:

- At least 25 openings were reported statewide;
- At least 40% of the positions were reported as difficult or very hard to fill;
- The education field had a weighted score of at least 15; and
- The education field requires completion of an accredited professional educator preparation program or other 4-year college program required for licensed professionals.

Based upon the above criteria, the critical quality educator shortage areas for 2006-2007 were Music, Mathematics, Special Education, Science, Speech/Language Pathologist, World Languages, School Counselor, Library Media, and Business.

In 2006-2007, Montana school districts reported 1,674 vacancies for all education fields and reported a total of 474 vacancies in these nine areas.

**Table 2. Education Fields Impacted by Critical Quality Educator Shortages in 2006-2007**

Rank	Education Field	Total Vacancies <sup>2</sup>	Percent Difficult or Very Hard to Fill	Weighted Score	Total FTE Employed <sup>3</sup>
1	Music	63	86%	54	363
2	Mathematics	80	51%	41	558
3	Special Education	97	42%	41	871
4	Science	59	51%	30	487
5	Speech/Language Pathologist	33	91%	30	107
6	World Languages	39	62%	24	179
7	School Counselor	46	46%	21	448
8	Library Media	26	69%	18	377
9	Business and related	31	55%	17	154

The education fields impacted by critical quality educator shortages have not varied much in the past five years. An analysis of the responses to the Personnel Recruitment and Retention Report over the past five years shows the same nine fields as the most critical shortage areas.

<sup>2</sup> Total vacancies as reported by public school districts, state-funded schools, and special education cooperatives on the Personnel Recruitment and Retention Report for the 2006-2007 Annual Data Collection

<sup>3</sup> Total FTE Employed as reported by public school districts, state-funded schools and special education cooperatives on the Personnel Assignment report for the 2006-2007 Annual Data Collection

The Personnel Recruitment and Retention Report included a category for "Career and Technical Education." This category is assumed to include positions that may be filled by individuals holding a class 4 career and vocational/technical education license, which does not require completion of a professional educator preparation program. While this education field ranked high among the fields impacted by critical shortages, these individuals may be teaching without completing a professional educator preparation education program or other 4-year program required for professional licensure. Therefore, this education field was not included in the list of critical shortage areas. The report also showed the "Other" category among the most critical shortage areas. Given that there is no detail to identify the education fields included in the "other" category, this education field is not included in the list of shortage areas.

It is important to note that the education fields listed in the Personnel Recruitment and Retention Report do not include every endorsement area or personnel assignment type. The format of the report was developed prior to the passage of SB 2. While the report provides general information about shortage areas, better tools can be developed in the future to identify shortage areas. It should also be noted that the responses from districts are subjective and may not always be complete.

### **Validation of Measures based upon Independent Data Sources**

Section 20-4-111, MCA authorizes the Superintendent of Public Instruction to grant an emergency authorization of employment to an individual who does not hold a valid educator license when a district cannot secure the services of a person holding a valid license. The individual must have previously held a valid educator license or must meet the standards of preparation prescribed by the policies of the Board of Public Education for and during an emergency. Emergency authorizations are only valid for one school fiscal year. The data on emergency authorizations issued since July 1, 2002 validates the critical quality educator shortage areas that are listed in this report. Of the 99 emergency authorizations issued for school fiscal years 2003 through 2007, 69 (70%) were to individuals who taught in one of the nine critical shortage areas listed above.

The personnel assignment information reported by school districts for 2006-2007 through the Annual Data Collection (ADC) also validates the selection of these nine education fields. Of the 62.67 FTE positions that were filled by individuals who did not hold a valid educator license or were misassigned in 2006-2007, 29.9 (48%) of these FTE were teaching in one of the nine education fields listed in this report. These data do not include special education cooperatives, which also experience difficulty hiring educators in the nine identified education fields.

### **Future Improvements to School Staffing Data**

The Office of Public Instruction, with funding from the 2007 legislature, is in the planning and design phase for a new information system related to school staffing. With the new system, the OPI should be able to provide better information to the Board of Public Education and other stakeholders on the education and experience levels of school staff as well as the supply and demand for quality educators. The new system is planned to be operational for the 2009-2010 school year.

## **List of Impacted Schools**



## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Beaverhead	0003	0004	Grant School	EL	8	8	0	16
Beaverhead	0009	0010	Lima High School	HS	8	5	0	13
Beaverhead	0009	0011	Lima School	EL	8	7	0	15
Beaverhead	0009	1667	Lima 7-8	GR78	8	8	0	16
Beaverhead			Montana Youth Challenge					
Big Horn	0021	0027	Pryor Elem School	EL	4	8	1	13
Big Horn	0021	1668	Pryor 7-8	GR78	4	8	7	19
Big Horn	0023	0033	Crow Agency School	EL	4	8	8	20
Big Horn	0023	1315	Fort Smith School	EL	8	8	0	16
Big Horn	0025	0039	Lodge Grass School	EL	8	8	8	24
Big Horn	0025	1669	Lodge Grass 7-8	GR78	8	8	8	24
Big Horn	0026	0041	Wyola School	EL	8	8	8	24
Big Horn	0026	1583	Wyola 7-8	GR78	8	8	0	16
Big Horn	1190	0040	Lodge Grass High School	HS	8	8	7	23
Big Horn	1214	1553	Plenty Coups High School	HS	4	8	8	20
Blaine	0028	0046	Meadowlark School	EL	8	3	0	11
Blaine	0028	1798	Chinook 7-8	GR78	8	3	0	11
Blaine	0028	1828	Hartland Elementary School	EL	8	8	0	16
Blaine	0030	0048	Harlem Elementary School	EL	8	6	1	15
Blaine	0030	1643	Harlem 7-8	GR78	8	6	1	15
Blaine	0031	0049	Harlem High School	HS	8	5	0	13
Blaine	0044	0069	Turner School	EL	8	6	0	14
Blaine	0044	1670	Turner 7-8	GR78	8	7	0	15
Blaine	0045	0070	Turner High School	HS	8	6	0	14
Blaine	1213	0072	Lodge Pole School	EL	8	8	2	18
Blaine	1213	1551	Hays-Lodge Pole High Sch	HS	8	8	8	24
Blaine	1213	1659	Hays-Lodge Pole 7-8	GR78	8	8	8	24
Blaine	9689		Bear Paw Cooperative					
Broadwater	0055	0076	Cecelia Hazelton School	EL	8	4	0	12
Broadwater	0055	1671	Townsend 7-8	GR78	8	3	0	11
Carbon	0059	0085	Bridger Elementary School	EL	8	4	0	12
Carbon	0059	0086	Bridger High School	HS	8	3	0	11
Carbon	0059	1672	Bridger 7-8	GR78	8	4	0	12
Carbon	0060	1635	Joliet 7-8	GR78	8	3	0	11
Carbon	0069	0095	Roberts School	EL	8	3	0	11
Carbon	0069	0096	Roberts High School	HS	8	3	0	11

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Carbon	0070	0097	Boyd School	EL	8	5	0	13
Carbon	0071	1674	Fromberg 7-8	GR78	8	3	0	11
Carbon	0072	0099	Fromberg High School	HS	8	3	0	11
Carbon	0076	0102	Belfry School	EL	8	4	0	12
Carbon	0076	0103	Belfry High School	HS	8	6	0	14
Carbon	0076	1675	Belfry 7-8	GR78	8	7	0	15
Carter	0087	0118	Ekalaka Elementary School	EL	8	4	0	12
Carter	0087	1676	Ekalaka 7-8	GR78	8	3	0	11
Cascade	0101	0158	Cascade School	EL	8	4	0	12
Cascade	0101	1661	Cascade 7-8	GR78	8	5	0	13
Cascade	0102	0157	Cascade High School	HS	8	3	0	11
Cascade	0118	0174	Simms High School	HS	8	4	0	12
Cascade	0127	0183	Vaughn School	EL	4	8	0	12
Cascade	0131	0188	Ulm School	EL	4	7	0	11
Cascade	1225	0173	Fort Shaw Elem School	EL	8	3	0	11
Cascade	9258	9368	MT Sch For Deaf & Blnd EI	EL				
Cascade	9258	9371	MT Sch For Deaf & Blnd HS	HS				
Cascade	9699		North Ctrl Learn Res Ctr					
Chouteau	0133	0190	Fort Benton School	EL	8	4	0	12
Chouteau	0137	0197	F E Miley School	EL	8	4	0	12
Chouteau	0137	1607	Big Sandy 7-8	GR78	8	5	0	13
Chouteau	0138	0195	Big Sandy High School	HS	8	4	0	12
Chouteau	0145	0204	Highwood School	EL	8	3	0	11
Chouteau	0145	1681	Highwood Middle School	MS	8	3	0	11
Chouteau	0153	0213	Geraldine School	EL	8	6	0	14
Chouteau	0153	1682	Geraldine 7-8	GR78	8	6	0	14
Chouteau	0154	0214	Geraldine High School	HS	8	5	0	13
Chouteau	9871		Chouteau Co Joint Service					
Custer	9034	9415	Pine Hills Youth Corr Facil HS	HS				
Custer	9034	9935	Pine Hills Youth Corr Facil EI	EL				
Custer	9692		Big Country Coop					
Daniels	0194	0267	Scobey School	EL	8	3	0	11
Daniels	0194	1650	Scobey 7-8	GR78	8	3	0	11
Daniels	0196	0269	Peerless School	EL	8	7	0	15
Daniels	0196	0270	Peerless High School	HS	8	8	0	16
Daniels	0196	1683	Peerless 7-8	GR78	8	8	0	16

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Dawson	0227	0310	Richey School	EL	8	3	0	11
Dawson	0228	0311	Richey High School	HS	8	3	0	11
Fergus	0268	0367	Grass Range School	EL	8	5	0	13
Fergus	0268	1795	Grass Range 7-8	GR78	8	5	0	13
Fergus	0269	0368	Grass Range High School	HS	8	4	0	12
Fergus	0273	1688	Moore 7-8	GR78	8	3	0	11
Fergus	0274	0373	Moore High School	HS	8	5	0	13
Fergus	0280	0378	Roy School	EL	8	5	0	13
Fergus	0280	1689	Roy 7-8	GR78	8	3	0	11
Fergus	0281	0380	Denton School	EL	8	3	0	11
Fergus	0281	1690	Denton 7-8	GR78	8	5	0	13
Fergus	0282	0381	Denton High School	HS	8	4	0	12
Fergus	0291	0391	Winifred School	EL	8	3	0	11
Fergus	0291	0392	Winifred High School	HS	8	3	0	11
Fergus	0291	1691	Winifred 7-8	GR78	8	4	0	12
Fergus	1218	1580	Ayers School	EL	8	8	0	16
Fergus	9691		Central Mt Learn Res Ctr					
Flathead	0330	0442	Bigfork School	EL	8	3	0	11
Flathead	0341	0455	Marion School	EL	8	5	0	13
Flathead	0341	1697	Marion 7-8	GR78	8	5	0	13
Flathead	1223	1651	West Glacier School	EL	8	3	0	11
Flathead	9695		Flathead County Coop					
Gallatin	0354	0476	Willow Creek School	EL	8	4	0	12
Gallatin	0355	0477	Willow Creek High School	HS	8	3	0	11
Gallatin	0364	0486	Gallatin Gateway School	EL	8	3	0	11
Gallatin	0374	0495	West Yellowstone School	EL	8	3	0	11
Gallatin	0374	0496	West Yellowstone HS	HS	8	3	0	11
Gallatin	0374	1704	West Yellowstone 7-8	GR78	8	5	0	13
Gallatin	9696		Gallatin/Madison Coop					
Garfield	0377	0500	Jordan Elementary School	EL	8	3	0	11
Garfield	0377	1705	Jordan 7-8	GR78	8	3	0	11
Garfield	0394	0531	Ross School	EL	8	8	0	16
Glacier	0400	0537	Babb School	EL	8	6	0	14
Glacier	0400	0538	K W Bergan School	EL	0	8	8	16
Glacier	0400	0539	Napi School	EL	4	8	8	20
Glacier	0400	1485	Vina Chattin School	EL	4	8	8	20

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Glacier	0400	1613	Browning Middle School	MS	4	8	8	20
Glacier	0401	0543	Browning High School	HS	0	8	8	16
Glacier	0404	0548	East Glacier Park School	EL	8	7	0	15
Golden Valley	0407	0550	Ryegate School	EL	8	7	0	15
Golden Valley	0407	0551	Ryegate High School	HS	8	5	0	13
Golden Valley	0407	1706	Ryegate 7-8	GR78	8	3	0	11
Golden Valley	0411	0555	Lavina School	EL	8	6	0	14
Golden Valley	0411	0556	Lavina High School	HS	8	4	0	12
Golden Valley	0411	1707	Lavina 7-8	GR78	8	8	0	16
Granite	0416	0560	Philipsburg School	EL	8	3	0	11
Granite	0416	0565	Granite High School	HS	8	4	0	12
Granite	0416	1708	Philipsburg 7-8	GR78	8	6	0	14
Granite	0419	0563	Drummond School	EL	8	4	0	12
Hill	0424	0569	Davey Elementary	EL	4	8	0	12
Hill	0425	0570	Box Elder School	EL	8	7	0	15
Hill	0425	1710	Box Elder 7-8	GR78	8	8	7	23
Hill	0426	0571	Box Elder High School	HS	8	8	2	18
Hill	1207	0579	Rocky Boy School	EL	8	8	8	24
Hill	1207	1711	Rocky Boy 7-8	GR78	8	8	7	23
Hill	1217	1578	Gildford Colony School	EL	8	8	0	16
Hill	1229	1807	Rocky Boy High School	HS	8	8	8	24
Hill	1233	0588	North Star 7-8	GR78	8	4	0	12
Hill	1233	1536	North Star School	EL	8	5	0	13
Jefferson	0453	0607	Whitehall Elementary	EL	8	3	0	11
Jefferson	0453	1570	Whitehall 7-8	GR78	8	4	0	12
Jefferson	0456	0610	Boulder Elementary School	EL	8	6	0	14
Jefferson	0456	1714	Boulder 7-8	GR78	8	4	0	12
Jefferson	9034	9973	Riverside Youth Corr Facil El	EL				
Jefferson	9034	9974	Riverside Youth Corr Facil HS	HS				
Judith Basin	0464	0617	Stanford School	EL	8	4	0	12
Judith Basin	0464	0618	Stanford High School	HS	8	3	0	11
Judith Basin	0464	1716	Stanford 7-8	GR78	8	3	0	11
Judith Basin	0469	0622	Hobson School	EL	8	3	0	11
Judith Basin	0469	0623	Hobson High School	HS	8	4	0	12
Judith Basin	0469	1717	Hobson 7-8	GR78	8	3	0	11
Judith Basin	0472	0626	Geyser School	EL	8	4	0	12

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Judith Basin	0472	1617	Surprise Creek School	EL	8	8	0	16
Judith Basin	0472	1718	Geyser 7-8	GR78	8	4	0	12
Judith Basin	0473	0627	Geyser High School	HS	8	4	0	12
Lake	0474	0628	Arlee Elementary	EL	4	6	1	11
Lake	0481	0642	St Ignatius Elementary School	EL	8	6	1	15
Lake	0481	0643	St Ignatius High School	HS	8	4	0	12
Lake	0481	1719	St Ignatius Middle School	MS	8	5	1	14
Lake	1199	0638	Pablo Elementary	EL	8	7	0	15
Lake	1199	0639	K William Harvey Elem	EL	8	5	0	13
Lake	1199	1519	Ronan Middle School	MS	8	5	0	13
Lake	1200	0640	Ronan High School	HS	8	4	1	13
Lake	1205	0635	Charlo Elementary	EL	8	4	0	12
Lake	1205	1602	Charlo 7-8	GR78	8	4	0	12
Lake	1206	0636	Charlo High School	HS	8	5	0	13
Lewis & Clark	0495	0668	Wolf Creek School	EL	8	6	0	14
Lewis & Clark	0502	0676	Augusta Elementary School	EL	8	3	0	11
Lewis & Clark	0502	1722	Augusta 7-8	GR78	8	5	0	13
Lewis & Clark	0503	0677	Augusta High School	HS	8	5	0	13
Lewis & Clark	1221	0675	Lincoln Elementary School	EL	8	5	0	13
Lewis & Clark	1221	1610	Lincoln High School	HS	8	4	0	12
Lewis & Clark	1221	1721	Lincoln 7-8	GR78	8	4	0	12
Lewis & Clark	9697		Prickly Pear Coop					
Lincoln	0519	0696	W F Morrison School	EL	8	6	0	14
Lincoln	0519	1663	Troy 7-8	GR78	8	5	0	13
Lincoln	0520	0697	Troy High School	HS	8	4	0	12
Lincoln	0527	0710	Eureka Elementary School	EL	8	5	0	13
Lincoln	0527	1724	Eureka 7-8	GR78	8	4	0	12
Lincoln	0528	0711	Lincoln Co High School	HS	8	4	0	12
Lincoln	0529	0712	Fortine School	EL	8	5	0	13
Lincoln	0534	0717	Trego School	EL	8	7	0	15
Madison	0537	0721	Sheridan Elementary Schl	EL	8	3	0	11
Madison	0540	0723	Twin Bridges School	EL	8	3	0	11
Madison	0540	0724	Twin Bridges High School	HS	8	3	0	11
Madison	0540	1726	Twin Bridges 7-8	GR78	8	3	0	11
Madison	0543	0727	Harrison High School	HS	8	3	0	11
Madison	0543	1727	Harrison 7-8	GR78	8	4	0	12

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Madison	0546	1728	Ennis 7-8	GR78	8	3	0	11
McCone	0547	0732	Redwater School	EL	8	3	0	11
McCone	0547	1406	Bo Peep School	EL	8	4	0	12
McCone	0547	1800	Redwater 7-8	GR78	8	3	0	11
McCone	9701		Prairie View Coop					
Meagher	0569	0758	White Sulphur Springs El	EL	8	5	0	13
Meagher	0569	1729	White Sulphur Springs 7-8	GR78	8	4	0	12
Meagher	0570	0759	White Sulphur Springs HS	HS	8	4	0	12
Mineral	0579	0767	Superior Elementary	EL	8	5	0	13
Mineral	0579	0768	Superior High School	HS	8	4	0	12
Mineral	0579	1731	Superior 7-8	GR78	8	5	0	13
Mineral	0582	0770	St Regis School	EL	8	7	0	15
Mineral	0582	0771	St Regis High School	HS	8	6	0	14
Mineral	0582	1732	St Regis 7-8	GR78	8	8	0	16
Missoula	0584	1434	Seeley-Swan High School	HS	8	3	0	11
Missoula	0597	0801	Seeley Lake Elementary	EL	8	5	0	13
Missoula	0597	1740	Seeley Lake 7-8	GR78	8	3	1	12
Missoula	9698		Missoula Area Coop					
Musselshell	0605	0809	Central School	EL	8	5	0	13
Musselshell	0605	1644	Roundup 7-8	GR78	8	6	0	14
Musselshell	0606	0811	Roundup H S	HS	8	3	0	11
Musselshell	0607	0812	Melstone School	EL	8	5	0	13
Musselshell	0607	1742	Melstone 7-8	GR78	8	3	0	11
Park	1215	1564	Arrowhead School	EL	8	3	0	11
Park	1215	1821	Arrowhead 7-8	GR78	8	3	0	11
Park	9700		Park County Coop					
Petroleum	0642	0852	Winnett School	EL	8	8	0	16
Petroleum	0642	0853	Winnett High School	HS	8	5	0	13
Petroleum	0642	1744	Winnett 7-8	GR78	8	7	0	15
Phillips	0647	0862	Dodson School	EL	8	8	1	17
Phillips	0647	1745	Dodson 7-8	GR78	8	8	0	16
Phillips	0648	0863	Dodson High School	HS	8	8	0	16
Phillips	0657	0873	Saco High School	HS	8	4	0	12
Phillips	0659	0875	Malta High School	HS	8	4	0	12
Phillips	0659	1504	Malta K-6	EL	8	5	0	13
Phillips	0659	1505	Malta 7-8	GR78	8	5	0	13

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Phillips	0659	1590	Zortman Grade School	EL	8	7	0	15
Phillips	0659	1605	Loring Colony School	EL	8	8	0	16
Phillips	0663	0878	Whitewater School	EL	8	8	0	16
Phillips	0663	0879	Whitewater High School	HS	8	5	0	13
Phillips	0663	1747	Whitewater 7-8	GR78	8	6	0	14
Phillips	1203	0872	Saco School	EL	8	6	0	14
Phillips	1203	1746	Saco 7-8	GR78	8	5	0	13
Pondera	0671	0888	Dupuyer School	EL	8	7	0	15
Pondera	0679	0898	Valier School	EL	8	4	0	12
Pondera	0679	1749	Valier 7-8	GR78	8	5	0	13
Pondera	0680	0899	Valier High School	HS	8	4	0	12
Pondera	1226	0886	Heart Butte Elementary	EL	8	8	2	18
Pondera	1226	1656	Heart Butte High School	HS	8	8	8	24
Pondera	1226	1748	Heart Butte 7-8	GR78	8	8	8	24
Pondera	9755		Big Sky SE Coop					
Powder River	0705	0930	Broadus School	EL	8	3	0	11
Powder River	9705		Tri County Coop					
Powell	0719	0947	Elliston School	EL	8	4	0	12
Powell	9703		Great Divide Educ Serv					
Prairie	0726	0954	Terry School	EL	8	4	0	12
Prairie	0726	1752	Terry 7-8	GR78	8	3	0	11
Ravalli	0738	0971	Victor School	EL	8	4	0	12
Ravalli	0738	0972	Victor High School	HS	8	4	0	12
Ravalli	0738	1753	Victor Middle School	MS	8	3	1	12
Ravalli	0740	0973	Darby School	EL	8	4	0	12
Ravalli	0740	0974	Darby High School	HS	8	3	0	11
Ravalli	0740	1608	Darby 7-8	GR78	8	4	0	12
Ravalli	9690		Bitterroot Valley Coop					
Richland	0747	1754	Savage 7-8	GR78	8	3	0	11
Richland	0750	0986	Fairview School	EL	8	3	0	11
Richland	0750	1755	Fairview 7-8	GR78	8	5	0	13
Richland	0751	0987	Fairview High School	HS	8	3	0	11
Richland	0768	1756	Lambert 7-8	GR78	8	4	0	12
Roosevelt	0775	1014	Poplar 5-6 School	EL	8	8	8	24
Roosevelt	0775	1015	Poplar School	EL	8	8	2	18
Roosevelt	0775	1550	Poplar 7-8	GR78	8	8	8	24



## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Roosevelt	0776	1016	Poplar High School	HS	8	8	8	24
Roosevelt	0777	1017	Culbertson School	EL	8	4	0	12
Roosevelt	0777	1758	Culbertson 7-8	GR78	8	3	0	11
Roosevelt	0780	1022	Northside School	EL	0	7	5	12
Roosevelt	0780	1532	Wolf Point 7-8	GR78	0	8	4	12
Roosevelt	0782	1025	Barbara Gilligan School	EL	8	8	0	16
Roosevelt	0782	1759	Barbara Gilligan 7-8	GR78	8	8	3	19
Roosevelt	0783	1026	Brockton High School	HS	8	8	8	24
Roosevelt	0785	1027	Bainville School	EL	8	3	0	11
Roosevelt	0786	1029	Froid Elementary School	EL	8	6	0	14
Roosevelt	0786	1761	Froid 7-8	GR78	8	6	0	14
Roosevelt	0787	1030	Froid High School	HS	8	3	0	11
Roosevelt	9801		Roose-Valley Sp Ed Coop					
Rosebud	0792	1035	Lame Deer School	EL	8	8	8	24
Rosebud	0792	1626	Lame Deer 7-8	GR78	8	8	8	24
Rosebud	0794	1470	Rosebud School	EL	8	8	0	16
Rosebud	0794	1762	Rosebud 7-8	GR78	8	8	0	16
Rosebud	0795	1038	Rosebud High School	HS	8	6	0	14
Rosebud	0796	1603	Pine Butte Elementary Sch	EL	8	3	0	11
Rosebud	0796	1609	Frank Brattin Middle Schl	MS	8	3	0	11
Rosebud	0800	1043	Ashland School	EL	8	8	1	17
Rosebud	0800	1763	Ashland 7-8	GR78	8	8	1	17
Rosebud	1230	1816	Lame Deer High School	HS	8	7	7	22
Sanders	0802	1045	Plains Elementary School	EL	8	5	0	13
Sanders	0802	1627	Plains 7-8	GR78	8	5	0	13
Sanders	0803	1046	Plains High School	HS	8	3	0	11
Sanders	0804	1047	Thompson Falls Elem Schl	EL	8	6	0	14
Sanders	0804	1764	Thompson Falls 7-8	GR78	8	5	0	13
Sanders	0807	1050	Trout Creek School	EL	8	7	0	15
Sanders	0807	1820	Trout Creek 7-8	GR78	8	6	0	14
Sanders	0808	1051	Paradise School	EL	8	8	0	16
Sanders	0809	1052	Dixon Elementary	EL	8	7	0	15
Sanders	0809	1824	Dixon 7-8	GR78	8	8	0	16
Sanders	0811	1054	Noxon School	EL	8	4	0	12
Sanders	0811	1765	Noxon 7-8	GR78	8	4	0	12
Sanders	0812	1055	Noxon High School	HS	8	3	0	11



## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Sanders	0813	1056	Camas Prairie School	EL	8	8	1	17
Sanders	0814	1057	Hot Springs School	EL	8	6	0	14
Sanders	0814	1766	Hot Springs 7-8	GR78	8	6	0	14
Sanders	0815	1058	Hot Springs High School	HS	8	6	0	14
Sanders	9702		Sanders County Coop					
Sheridan	0819	1061	Westby School	EL	8	3	0	11
Sheridan	0819	1062	Westby High School	HS	8	3	0	11
Sheridan	0819	1767	Westby 7-8	GR78	8	3	0	11
Sheridan	0822	1064	Medicine Lake School	EL	8	4	0	12
Sheridan	0822	1065	Medicine Lake High School	HS	8	3	0	11
Sheridan	0822	1662	Medicine Lake 7-8	GR78	8	5	0	13
Sheridan	0828	1070	Plentywood School	EL	8	4	0	12
Sheridan	0828	1071	Plentywood High School	HS	8	3	0	11
Sheridan	0828	1768	Plentywood 7-8	GR78	8	4	0	12
Sheridan	9693		Sheridan/Daniels Coop					
Stillwater	0850	1773	Reed Point 7-8	GR78	8	3	0	11
Stillwater	0853	1116	Fishtail School	EL	8	5	0	13
Stillwater	0858	1122	Rapelje School	EL	8	5	0	13
Stillwater	0858	1774	Rapelje 7-8	GR78	8	6	0	14
Stillwater	0859	1123	Rapelje High School	HS	8	3	0	11
Stillwater	9704		Stillwater/Swt Grass Coop					
Sweet Grass	0872	1137	Greycliff School	EL	8	5	0	13
Teton	0883	1147	Choteau School	EL	8	3	0	11
Teton	0890	1154	Fairfield Elementary School	EL	8	3	0	11
Teton	0890	1778	Fairfield 7-8	GR78	8	3	0	11
Teton	0895	1159	Power High School	HS	8	3	0	11
Teton	0900	1165	Greenfield School	EL	8	3	0	11
Teton	0900	1814	Greenfield 7-8	GR78	8	3	0	11
Teton	1235	1156	Dutton/Brady Elementary	EL	8	8	1	17
Teton	1235	1157	Dutton/Brady High School	HS	8	4	0	12
Toole	0903	1167	Sunburst Elementary	EL	8	5	0	13
Toole	0903	1781	Sunburst Middle School	MS	8	5	0	13
Treasure	0923	1193	Hysham School	EL	8	4	0	12
Treasure	0923	1194	Hysham High School	HS	8	4	0	12
Treasure	0923	1782	Hysham 7-8	GR78	8	4	0	12
Valley	0927	1205	Frazer Elementary	EL	8	8	7	23

## Schools and Special Education Cooperatives Impacted by Critical Quality Educator Shortages

County Name	LE	SC	SC Name	GradeType	Rural Isolation Score	Economic Disadvantage Score	Improvement Score	Total Score
Valley	0927	1783	Frazer 7-8	GR78	8	8	8	24
Valley	0928	1208	Frazer High School	HS	8	8	8	24
Valley	0932	1212	Hinsdale School	EL	8	5	0	13
Valley	0932	1784	Hinsdale 7-8	GR78	8	4	0	12
Valley	0933	1213	Hinsdale High School	HS	8	4	0	12
Valley	0935	1214	Opheim School	EL	8	3	0	11
Valley	0935	1785	Opheim 7-8	GR78	8	4	0	12
Valley	0937	1218	Nashua School	EL	8	4	0	12
Valley	0937	1219	Nashua High School	HS	8	3	0	11
Valley	0937	1786	Nashua 7-8	GR78	8	5	0	13
Valley	0941	1223	Lustre School	EL	8	3	0	11
Wheatland	0945	1228	Hillcrest School	EL	8	5	0	13
Wheatland	0945	1787	Hillcrest 7-8	GR78	8	5	0	13
Wheatland	0946	1230	Harlowton High School	HS	8	4	0	12
Wheatland	0948	1232	Judith Gap School	EL	8	4	0	12
Wheatland	0948	1788	Judith Gap 7-8	GR78	8	3	0	11
Wibaux	0964	1238	Wibaux Elementary School	EL	8	4	0	12
Wibaux	0964	1239	Wibaux High School	HS	8	3	0	11
Wibaux	0964	1789	Wibaux 7-8	GR78	8	5	0	13
Yellowstone	0975	1289	Custer High School	HS	8	4	0	12
Yellowstone	9694		Eastern Yellowstone Coop					
Yellowstone	9707		Yellowstone/W Carbon Coop					

## Appendix A – Locale Codes

### What are locale codes?

“Locale codes” are derived from a classification system originally developed by NCES in the 1980’s to describe a school’s location ranging from “large city” to “rural.” The codes are based on the physical location represented by an address that is matched against a geographic database maintained by the Census Bureau. This database is the Topographically Integrated and Geographically Encoded Referencing system, or TIGER. In 2005 and 2006, NCES supported work by the Census Bureau to redesign the original locale codes in light of changes in the U.S. population and the definition of key geographic concepts.

The locale codes are based on an address’s proximity to an urbanized area (a densely settled core with densely settled surrounding areas). The urban-centric locale code system classifies territory into four major types: city, suburban, town, and rural. Each type has three subcategories. For city and suburb, these are gradations of size – large, midsize, and small. Towns and rural areas are further distinguished by their distance from an urbanized area. They can be characterized as fringe, distant, or remote.

### How are locale codes assigned to school districts?

A school district’s locale code is not assigned on the basis of the central office address. It is derived from the locale codes of the schools in the district. If 50 percent or more of the public school students attend schools with the same locale code, that locale code is assigned to the district. For example, if 60 percent of students were enrolled in schools with a “rural - distant” locale code, and 40 percent were enrolled in schools with a “town - small” locale code, the district would be assigned a “rural – distant” locale code. If no single locale code accounts for 50 percent of the students, then the major category (city, suburb, town, or rural) with the greatest percent of students determines the locale; the locale code assigned is the smallest or most remote subcategory for that category.

### Urban-Centric Locale Codes

#### 11 - City, Large:

Territory inside an urbanized area and inside a principal city with population of 250,000 or more.

#### 12 - City, Midsize:

Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.

#### 13 - City, Small:

Territory inside an urbanized area and inside a principal city with population less than 100,000.

#### 21 - Suburb, Large:

Territory outside a principal city and inside an urbanized area with population of 250,000 or more.

#### 22 - Suburb, Midsize:

Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.

#### 23 - Suburb, Small:

Territory outside a principal city and inside an urbanized area with population less than 100,000.

#### 31 - Town, Fringe:

Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.

#### 32 - Town, Distant:

Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.

#### 33 - Town, Remote:

Territory inside an urban cluster that is more than 35 miles from an urbanized area.

#### 41 - Rural, Fringe:

Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.

#### 42 - Rural, Distant:

Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.

#### 43 - Rural, Remote:

Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

## **Appendix B – Personnel Recruitment and Retention Report**

## Appendix C – Emergency Authorizations for Employment

Emergency Authorizations for Employment by Endorsement - School Fiscal Years 2003-2007

<b>Endorsement</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>5-Year Total</b>
Agriculture	1				2	3
Art K-12	1			1	1	3
Biology	1		1	1		3
Broadfield Science	2					2
Broadfield Social Studies	2		1			3
Business Education	1		1	1		3
Computer Science K-12			2			2
Drama			1			1
Elementary	3		1	1		5
English	1	1				2
Family & Consumer Sciences	1		3	2		6
History	1					1
Industrial Arts						0
Mathematics 5-12	3	1	6	1		11
Music K- 12	5	3	3	4		15
PE/Health K-12	1					1
Principal K-12	1					1
School Counseling K-12	1	2	5	3	1	12
Special Education P-12	3		1	1		5
Technology Education	1					1
Trade & Industry - Health Occupations						0
Trade and Industry - Automotive				1		1
World Language - French K-12	3	1	1			5
World Language - Japanese K-12		1	1	1		3
World Language - Latin K-12			1	2		3
World Language - Spanish K-12	3	1	2	1		7
<b>Total</b>	<b>35</b>	<b>10</b>	<b>30</b>	<b>20</b>	<b>4</b>	<b>99</b>

Of the 99 emergency authorizations for employment granted by the Superintendent of Public Instruction for school fiscal years 2003 through 2007, 69 (70%) were to individuals who taught in one of the nine critical shortage areas identified in this report.